

LISTING OF CLAIMS

The following claims are pending in the application.

1 – 8. (Canceled)

9. (Previously presented) A ring compression device that applies force on a periphery of a ring to thereby compress the ring and fix the ring on a mounting body placed inside the ring, comprising:

a non-rotatable substrate having a central axis;

a plurality of longitudinal pressing members arranged on a first plane different from that of the substrate and radially around the central axis, each of said pressing members having one end pointing toward the central axis, the pressing members capable of freely moving toward or away from the central axis in the first plane;

a rotating body configured to rotate around the central axis in second plane that is parallel to the first plane; and

a driving mechanism having cam followers respectively provided on the pressing members and cam holes formed in the rotating body and respectively engaged with the cam followers, the driving mechanism being configured to integrally move, along with the rotation of the rotating body in one direction, that engages with the rotating body and the pressing members such that when the rotating body rotates, all of the pressing members integrally move toward the central axis and apply force on the periphery of the ring with the one end of each of the pressing members; and

a hooking mechanism that hooks the ring, the hooking mechanism having a claw member abutting on an edge face on one side of the ring on the side of the substrate and also having a movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member.

10. (Previously Presented) The ring compression device according to claim 9, wherein the rotating body has an initial position at which the one end of at least one of the pressing members is located on a circle around the central axis that corresponds to the periphery of the ring and the one end of each of the other pressing members is located outside of the circle, and

the driving mechanism engages with the rotating body and the pressing members such that, when the rotating body rotates, the one end of each of the other pressing members moves toward the circle, and once the one end of each of the other pressing members is located on the circle, all the pressing members move towards the central axis.

11. (Previously Presented) The ring compression device according to claim 9, wherein, in an initial state, the one end of at least one of the pressing members is located on a circle with the central axis as a center and diameter of the ring as a diameter, and the one end of each of the other pressing members is located outside of the circle, wherein

the driving mechanism engages with the rotating body and the pressing members such that, when the rotating body rotates, the one end of each of the other pressing members moves toward the circle, and once the one end of the other pressing members is located on the circle, all the pressing members move towards the central axis.

12. (Original) The ring compression device according to claim 9, further comprising a holding mechanism configured to hold the mounting body in such a manner that the mounting body is aligned to the central axis.

13. (Previously Presented) The ring compression device according to claim 9, further comprising a holding mechanism configured to hold the mounting body in such a manner that the mounting body is aligned to the central axis, wherein, in an initial state, that one end of at least one of the pressing members is located on a circle with the central axis as a center and diameter of the ring as a diameter, and the one end of each of the other pressing members is located outside of the circle, wherein

the driving mechanism engages with the rotating body and the pressing members such that, when the rotating body rotates, the one end of each of the other pressing members moves toward the circle, and once the one end of each of the other pressing members is located on the circle, all the pressing members move toward the central axis.

14. (Previously Presented) The ring compression device according to claim 9, further comprising:

a hooking mechanism that hooks the ring, the hooking mechanism having a claw member abutting on an edge face on one side of the ring on the side of the substrate and also having a movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member, wherein, in an initial state, the one end of at least one of the pressing members is located on a circle with the central axis as a center and diameter of the ring as a diameter, and the one end of each of the other pressing members is located outside of the circle, wherein the driving mechanism engages with the rotating body and the pressing members such that, when the rotating body rotates the one end of each of the other pressing moves toward the circle, and once the one end of each of the other pressing members is located on the circle, all the pressing members move toward the central axis; and

a holding mechanism configured to hold the mounting body in such a manner that the mounting body is aligned to the central axis.

15. (Previously Presented) A ring compression method of applying force on a ring to fix the ring on a mounting body, comprising:

hooking the ring with one end of each of a plurality of longitudinal pressing members that can freely move in a first plane and in a radial direction with respect to an axis;

inserting the mounting body into a bore of the ring and holding the body in such a manner that the mounting body is aligned with the axis; and

forcibly moving the one end of each of the pressing members towards the axis by rotating in one direction a rotational body arranged in a second plane that is parallel to the first plane to act on the pressing members to thereby apply force on the ring, the rotational body having a plurality of cam holes in the second plane, the pressing members respectively having cam followers that engage with the cam holes,

wherein the hooking includes hooking the ring between a claw member abutting on an edge face on one side of the ring on the side of the substrate and also having a movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member.

16. (Previously Presented) The ring compression method according to claim 15, further comprising:

first controlling, before the hooking, such that the one end of at least one of the pressing members is located on a circle with the axis as a center and diameter of the ring as a diameter, and the one end of each of the other pressing members is located outside of the circle; and

second controlling, before the hooking and after the first controlling, such that the one end of each of the other pressing members move moves toward the circle, and once the one end of each of the other pressing members is located on the circle, all the pressing members move toward the central axis.